1. AMENDMENT (LISTING OF CLAIMS):

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A compound of general formula Formula I, which is an ionic complex:

$$r[D^{(nz)}] p[(W_q-S-X-L)^{(my)}]$$

formula I

in which **D** is a therapeutically useful molecule selected from the group consisting of a drug, peptide, protein, nucleic acid, mono- or oligosaccharide, and sugar-peptide conjugate;

r is an integer greater than or equal to 1;

p, n and m may be the same or different, and are independently integers greater than or equal to 1;

 ${\bf n}$ and ${\bf m}$ represent the overall magnitude of the charge on the molecules; and

z and y are charges, either positive (+) or negative (-), such that when z is positive, y is negative and vice versa;

and $[(W_q\text{-}S\text{-}X\text{-}L)^{(my)}]$ is a carrier compound, in which

X is a covalent bond, or is a linker group, selected from 2 to 14 atom spacers, which may be optionally substituted, branched or linear;

S is a mono- or oligosaccharide;

L is a lipidic moiety;

W may be absent, or is a 3 to 10 atom alkyl or heteroalkyl spacer, which may be branched or linear, and is substituted with one or more functional groups, each of which is charged or is capable of carrying a charge under physiological conditions; and

q is 0 when W is absent, or is an integer, which ranges from 3 to the number of hydroxyls available for substitution on the mono- or oligosaccharide.

- 2. (Canceled)
- 3. (Previously Presented) The compound of claim 1, in which **D** is a drug.
- 4. (Previously Presented) The compound of claim 1, in which the linker X is attached to the mono- or oligosaccharide S through the anomeric position.
- 5. (Currently Amended) The compound of claim 1, in which the linker X is attached to the mono- or oligosaccharide S viavia an O-glycoside, C-glycoside, N-glycoside, S-glycoside, amide, urea, thiourea, carbamate, thiocarbamate, carbonate, ether or ester bond.
- 6. (Currently Amended) The compound of claim 1, in which the linker X is attached to the mono- or oligosaccharide S through a position other than the anomeric position viavia an amide, urea, thiourea, carbamate, thiocarbamate, carbonate, ether or ester bond.

- 7. (Currently Amended) The compound of claim 1, in which the linker X is attached to the lipidic moiety L viavia an amide, ester, ether, imine, carbamate, urea, thiourea, or carbonate linkage.
- 8. (Previously Presented) The compound of claim 1, in which **W** is substituted with one or more functional groups selected from the group consisting of an amidine, guanidinium, carboxylate, tetrazole, hydroxamic acid, hydrazide, amine, sulfate, phosphonate, phosphate and a sulfonate group.
- 9. (Currently Amended) The compound of claim 1, in which the lipidic moiety L is composed of:
 - (a) any combination of 1 to 4 lipoamino acids and/or lipoamino alcohols, of general formula Formula IIa of or IIb

$$\begin{array}{c|c}
O & R^2 \\
\hline
C & C & NH \\
\hline
O & NH \\
\hline
NH & NH
\end{array}$$
IIIb

in which each of R^1 and R^2 may independently be:

(i) hydrogen, or

(ii) a linear or branched chain alkyl or alkenyl group having 4 to 24 carbon atoms, which may optionally be substituted, provided that the substituents do not significantly adversely affect the lipophilic nature of the group,

with the proviso that both R^1 and R^2 cannot be hydrogen be hydrogen at the same time;

(b) a glycerol-based lipid of general formula Formula IIIa or IIIb

$$R^{1}=0$$
 $R^{2}=0$
 $(X)=0$
 $(X)=0$

in which R^1 and R^2 are as defined in general <u>formula Formula</u> IIa, and X is a linker group as defined in general <u>formula Formula</u> I; or

(c) a trishydroxymethylmethylamine-based lipid of general formula Iva or IvbIVa or IVb:

$$R^{PO}$$

$$R^{PO}$$

$$R^{PO}$$

$$R^{PO}$$

$$(X)O \longrightarrow OR^{F}$$

in which R^1 , R^2 , and R^3 are independently hydrogen or a linear or branched chain alkyl or alkenyl group having 4 to 24 carbon atoms, or an <u>arlyaryl</u> or arylalkyl group having 6 to 24 carbon atoms, said alkyl, alkenyl, aryl or arylalkyl groups may be optionally be substituted, provided that the substitutions do not significantly adversely affect the lipophilic nature of the group, and X is as defined in general <u>formula Formula I</u>; with the proviso that at least one of R^1 , R^2 , and R^3 must not be hydrogen.

- 10. (Previously Presented) The compound of claim 8, in which the lipidic moiety L contains one or more charged functional groups.
- 11. (Previously Presented) The compound of claim 10, in which the one or more charged functional groups are selected from the group consisting of amidinium, guanidinium, carboxylate, tetrazoline, hydroxamate, hydrazido, ammonium, sulfate, phosphonate, phosphate, and sulfonate.

12. (Currently Amended) The compound of claim 1, in which S is selected from the group consisting of a mono-, di- or tri-saccharide, and the lipidic moiety is one to three lipoaminoacids of general formula Formula IIa or IIb:

$$\begin{array}{c|c}
O & R^2 \\
\hline
C & C & NH \\
\hline
NH
\end{array}$$

III

in which each of R¹ and R² may independently be:

- (i) hydrogen, or
- (ii) a linear or branched chain alkyl or alkenyl group having 4 to 24 carbon atoms, which may optionally be substituted, provided that the substituents do not significantly adversely affect the lipophilic nature of the group,

with the proviso that both R¹ and R² cannot be hydrogen at the same time.

13. (Previously Presented) The compound of claim 1, in which r is greater than p.

14.-15. (Canceled)

16. (Previously Presented) The compound of claim 1, in which **D** is a sulfated oligosaccharide, charged oligosaccharide, sulfated antithrombotic or an aminoglycoside.

- 17. (Previously Presented) The compound of claim 13, in which **D** is a sulfated oligosaccharide, charged oligosaccharide, sulfated antithrombotic or an aminoglycoside.
- 18. (Withdrawn) A method of preparing a compound according to claim 1, comprising the step of forming a covalent bond between the mono- or oligosaccharide S and the linker X or the lipid L, in which the bond between S and X is an O-glycoside, C-glycoside, N-glycoside, S-glycoside, amide, urea, thiourea, carbamate, thiocarbamate, carbonate, ether or ester bond, and the bond between X and L is an amide, ester, ether, imine, carbamate, urea, thiourea, or carbonate bond.
- 19. (Currently Amended) A composition comprising the compound of claim 1—and—a pharmaceutically-acceptable carrier.
- 20. (Withdrawn) A method of preparation of a compound according to claim 1, comprising the step of mixing a drug molecule D with [(W_q-S-X-L) ^(my)] in which W, q, S, X, L, m and y are as defined in claim 1 in solution, followed by removal of the solvent(s) to provide a homogenous mixed salt.
- 21. (Withdrawn) A method of delivery of a therapeutically useful molecule, comprising the step of administering the molecule to a subject in need of such treatment in the form of a compound according to claim 1.

- 22. (Withdrawn) A method according to claim 21, in which the administration is by the oral route.
- 23. (Withdrawn) A method of treating or preventing a pathological condition, comprising the step of administering a suitable compound according to claim 1 to a subject in need of such treatment.
- 24. (Previously Presented) The compound of claim 1, in which the compound is piperacillin/2-acetamido-2-deoxy-N-(1-amino-(R/S)-dodecoyl)-β-D-glucopyrano-sylamine ionic complex.
- 25. (Previously Presented) The compound of claim 1, in which S is a low molecular weight heparin.
- 26. (Previously Presented) The compound of claim 25, in which the low molecular weight heparin is selected from the group consisting of fondaparinux, enoxaparin, delteparin, nadroparin and danaparoid.
- 27. (Previously Presented) The compound of claim 26, in which the low molecular weight heparin is fondaparinux.
- 28. (Currently Amended) A pharmaceutical composition comprising the compound The composition of claim 27, and a pharmaceutically acceptable carrier 19, formulated for administration to a human or a domestic or companion animal.

- 29. (Previously Presented) The compound of claim 3, wherein **D** is piperacillin.
- 30. (Previously Presented) The compound of claim 1, wherein **D** is a drug, peptide, mono- or oligosaccharide, or sugar-peptide conjugate.
- 31. (Previously Presented) The compound of claim 30, wherein said drug is an antibiotic.
- 32. (Previously Presented) The compound of claim 30, wherein said antibiotic is selected from the group consisting of gentamycin sulfate, neomycin, amakacin, tobramycin, netilmicin, and piperacillin.
- 33. (Previously Presented) The compound of claim 30, wherein said oligosaccharide is a heparanoid or sulfated oligosaccharide.
- 34. (Previously Presented) The compound of claim 33, wherein said oligosaccharide is a low molecular weight heparin.
- 35. (Currently Amended) A compound of general formula I, which is an ionic complex:

$$r[D^{(nz)}] p[(W_q-S-X-L)^{(my)}]$$

formula Formula I

in which **D** is a therapeutically useful molecule selected from the group consisting of a sulfated oligosaccharide, a charged oligosaccharide, a sulfated antithrombotic, and an aminoglycoside;

r is an integer greater than or equal to 1;

p, **n** and **m** may be the same or different, and are independently integers greater than or equal to 1;

n and m represent the overall magnitude of the charge on the molecules; and

z and y are charges, either positive (+) or negative (-), such that when z is positive, y is negative and vice versa;

and [(W_q-S-X-L) (my)] is a carrier compound, in which

X is a covalent bond, or is a linker group, selected from 2 to 14 atom spacers, which may be optionally substituted, branched or linear;

S is a mono- or oligosaccharide;

L is a lipidic moiety;

W may be absent, or is a 3 to 10 atom alkyl or heteroalkyl spacer, which may be branched or linear, and is substituted with one or more functional groups, each of which is charged or is capable of carrying a charge under physiological conditions; and q is 0 when W is absent, or is an integer, which ranges from 3 to the number of hydroxyls available for substitution on the mono- or oligosaccharide.

36. (Currently Amended) A lipoamino acid or lipoamino saccharide conjugate of general formula I:

$$r[D^{(nz)}] p[(W_q-S-X-L)^{(my)}]$$

formula I

wherein said conjugate forms an ionic complex with a therapeutically-useful drug. **D**; **r** is an integer greater than or equal to 1;

- **p**, **n** and **m** may be the same or different, and are independently integers greater than or equal to 1;
- n and m represent the overall magnitude of the charge on the molecules; and
- z and y are charges, either positive (+) or negative (-), such that when z is positive, y is negative and vice versa;

and [(W_q-S-X-L) (my)] is a carrier compound, in which

X is a covalent bond, or is a linker group, selected from 2 to 14 atom spacers, which may be optionally substituted, branched or linear;

S is a mono- or oligosaccharide;

L is a lipidic moiety;

- W may be absent, or is a 3 to 10 atom alkyl or heteroalkyl spacer, which may be branched or linear, and is substituted with one or more functional groups, each of which is charged or is capable of carrying a charge under physiological conditions; and
- q is 0 when W is absent, or is an integer, which ranges from 3 to the number of hydroxyls available for substitution on the mono- or oligosaccharide.
- 37. (Currently Amended) A compound of general formula I:

$$r[D^{(nz)}] p[(W_q-S-X-L)^{(my)}]$$

formula I

wherein **r** is an integer greater than or equal to 1;

p, **n** and **m** may be the same or different, and are independently integers greater than or equal to 1;

n and m represent the overall magnitude of the charge on the molecules; and

z and y are charges, either positive (+) or negative (-), such that when z is positive, y is negative and *vice versa*;

and [(W_q-S-X-L) (my)] is a carrier compound, in which

X is a covalent bond, or is a linker group, selected from 2 to 14 atom spacers, which may be optionally substituted, branched or linear;

S is a mono- or oligosaccharide;

L is a lipidic moiety;

W may be absent, or is a 3 to 10 atom alkyl or heteroalkyl spacer, which may be branched or linear, and is substituted with one or more functional groups, each of which is charged or is capable of carrying a charge under physiological conditions;

- q is 0 when W is absent, or is an integer, which ranges from 3 to the number of hydroxyls available for substitution on the mono- or oligosaccharide; and wherein D is a drug molecule that forms an ionic complex with said compound.
- 38. (New) The composition of claim 19, further comprising a pharmaceutically-acceptable carrier.